

Abstract of the Disclosure

A pump system for providing a pressurized liquid comprising an elevated supply reservoir of a liquid at a first pressure; at least one pair of vertically reciprocating liquid transfer vessels (each of the transfer vessels having a force transfer assembly operatively associated with it that transfers downward force into upward force and a liquid pump operatively associated with the force transfer assembly for delivering liquid at a second pressure that is greater than said first pressure) and a storage reservoir below said supply reservoir for receiving liquid from said supply reservoir and delivering said liquid to each of said liquid pumps. The supply reservoir is adapted to supply the liquid to the transfer vessels under gravity flow, and the liquid applied to said transfer vessels provides the downward force.